



# TORQ Analysis of Packaging and Filling Machine Operators and Tenders to Coating, Painting, and Spraying Machine Setters, Operators, and Tenders

## INPUT SECTION:

Transfer	Title	O*NET	Filters		
From Title:	Packaging and Filling Machine Operators and Tenders	51-9111.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	51-9121.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

## OUTPUT SECTION:

Grand TORQ:

88

Ability TORQ				Skills TORQ				Knowledge TORQ			
Level			87	Level			87	Level			88
Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add			
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
Visual Color Discrimination	59	18	75	Operation Monitoring	61	12	71	No Knowledge Upgrades Required!			
Arm-Hand Steadiness	48	6	65	Active Listening	52	1	70				
Rate Control	46	5	59								
Multilimb Coordination	50	2	59								

LEVEL and IMPT (IMPORTANCE) refer to the Target Coating, Painting, and Spraying Machine Setters, Operators, and Tenders.  
GAP refers to level difference between Packaging and Filling Machine Operators and Tenders and Coating, Painting, and Spraying Machine Setters, Operators, and Tenders.

## ASK ANALYSIS

### Ability Level Comparison - Abilities with importance scores over 50

Description	Packaging and Filling Machine Operators and Tenders	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	Importance
Visual Color Discrimination	41	59	75
Control Precision	60	50	68
Arm-Hand Steadiness	42	48	65
Manual Dexterity	53	48	62
Near Vision	60	46	62



Finger Dexterity	55		48		59
Multilimb Coordination	48		50		59
Rate Control	41		46		59
Static Strength	60		46		59
Trunk Strength	50		50		59
Far Vision	50		48		59
Information Ordering	42		42		56
Perceptual Speed	73		46		56
Visualization	48		46		56
Problem Sensitivity	48		42		53
Selective Attention	60		42		53
Hearing Sensitivity	48		42		53
Written Comprehension	44		41		50
Deductive Reasoning	44		41		50
Flexibility of Closure	57		41		50
Reaction Time	60		50		50
Speech Recognition	37		37		50

## Skill Level Comparison - Abilities with importance scores over 69

Description	Packaging and Filling Machine Operators and Tenders	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	Importance
Instructing	62	61	75
Operation Monitoring	49	61	71
Active Listening	51	52	70

## Knowledge Level Comparison - Knowledge with importance scores over 69

Description	Packaging and Filling Machine Operators and Tenders	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	Importance
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## Experience &amp; Education Comparison

Related Work Experience Comparison				Required Education Level Comparison			
Description	Packaging and Filling Machine Operators and Tenders	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders		Description	Packaging and Filling Machine Operators and Tenders	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	
10+ years	0%	0%		Doctoral	0%	0%	
8-10 years	0%	0%		Professional Degree	0%	0%	
6-8 years	14%	17%		Post-Masters Cert	0%	0%	
4-6 years	0%	0%		Master's Degree	0%	0%	
2-4 years	0%	20%		Post-Bachelor Cert	0%	0%	
1-2 years	0%	13%		Bachelors	0%	0%	
				AA or Equiv	14%	0%	



6-12 months	54%		5%	Some College	0%		0%
3-6 months	0%		14%	Post-Secondary Certificate	0%		16%
1-3 months	0%		0%	High School Diploma or GED	71%		49%
0-1 month	5%		12%	No HSD or GED	13%		34%
None	25%		16%				

Packaging and Filling Machine Operators and Tenders

Coating, Painting, and Spraying Machine Setters, Operators, and Tenders

## Most Common Educational/Training Requirement:

Short-term on-the-job training

Moderate-term on-the-job training

## Job Zone Comparison

2 - Job Zone Two: Some Preparation Needed

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Some previous work-related skill, knowledge, or experience may be helpful in these occupations, but usually is not needed. For example, a teller might benefit from experience working directly with the public, but an inexperienced person could still learn to be a teller with little difficulty.

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These occupations usually require a high school diploma and may require some vocational training or job-related course work. In some cases, an associate's or bachelor's degree could be needed.

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Employees in these occupations need anywhere from a few months to one year of working with experienced employees.

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## Tasks

## Packaging and Filling Machine Operators and Tenders

## Coating, Painting, and Spraying Machine Setters, Operators, and Tenders

## Core Tasks

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## Generalized Work Activities:

## Generalized Work Activities:

- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Evaluating Information to Determine Compliance with Standards - Using relevant information and individual judgment to determine whether events or processes comply with laws, regulations, or standards.
- Making Decisions and Solving Problems - Analyzing information and evaluating results to choose the best solution and solve problems.
- Scheduling Work and Activities - Scheduling events, programs, and activities, as well as the work of others.

- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Monitor Processes, Materials, or Surroundings - Monitoring and reviewing information from materials, events, or the environment, to detect or assess problems.
- Performing General Physical Activities - Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials.

## Specific Tasks

## Occupation Specific Tasks:

- Attach and align machine parts such as



## Specific Tasks

### Occupation Specific Tasks:

- Adjust machine components and machine tension and pressure according to size or processing angle of product.
- Attach identification labels to finished packaged items, or cut stencils and stencil information on containers, such as lot numbers or shipping destinations.
- Clean and remove damaged or otherwise inferior materials to prepare raw products for processing.
- Clean packaging containers, line and pad crates, or assemble cartons to prepare for product packing.
- Clean, oil, and make minor adjustments or repairs to machinery and equipment, such as opening valves or setting guides.
- Count and record finished and rejected packaged items.
- Inspect and remove defective products and packaging material.
- Monitor the production line, watching for problems such as pile-ups, jams, or glue that isn't sticking properly.
- Observe machine operations to ensure quality and conformity of filled or packaged products to standards.
- Package the product in the form in which it will be sent out, for example, filling bags with flour from a chute or spout.
- Regulate machine flow, speed, or temperature.
- Remove finished packaged items from machine and separate rejected items.
- Secure finished packaged items by hand tying, sewing, gluing, stapling, or attaching fastener.
- Sort, grade, weigh, and inspect products, verifying and adjusting product weight or measurement to meet specifications.
- Stack finished packaged items, or wrap protective material around each item and pack the items in cartons or containers.
- Start machine by engaging controls.
- Stock and sort product for packaging or filling machine operation, and replenish packaging supplies, such as wrapping paper, plastic sheet, boxes, cartons, glue, ink, or labels.
- Stop or reset machines when malfunctions occur, clear machine jams, and report malfunctions to a supervisor.
- Supply materials to spindles, conveyors, hoppers, or other feeding devices and unload packaged product.
- Tend or operate machine that packages product.

### Detailed Tasks

rollers, guides, brushes, and blades, using hand tools.

- Attach hoses or nozzles to machines, using wrenches and pliers, and make adjustments to obtain the proper dispersion of spray.
- Clean machines, related equipment, and work areas, using water, solvents and other cleaning aids.
- Determine paint flow, viscosity, and coating quality by performing visual inspections, or by using viscometers.
- Examine, measure, weigh, or test sample products to ensure conformance to specifications.
- Fill hoppers, reservoirs, troughs, or pans with material used to coat, paint, or spray, using conveyors or pails.
- Hold or position spray guns to direct spray onto articles.
- Observe machine gauges and equipment operation to detect defects or deviations from standards, and make adjustments as necessary.
- Operate auxiliary machines or equipment used in coating or painting processes.
- Paint small items and perform touch-up painting, using paint brushes.
- Perform test runs to ensure that equipment is set up properly.
- Place items or products on feedracks, spindles, or reel strands to coat, paint, or spray them, using hands, hoists, or trucklifts.
- Prepare and apply stencils, computer-generated decals, or other decorative items to finished products.
- Record operational data on specified forms.
- Remove materials, parts, or workpieces from painting or coating machines, using hand tools.
- Select appropriate coatings, paints, or sprays, or prepare them by mixing substances according to formulas, using automated paint mixing equipment.
- Set up and operate machines to paint or coat products with such materials as silver and copper solution, rubber, paint, glaze, oil, or rustproofing materials.
- Spray coated products with salt solutions to determine how they will resist corrosion.
- Start and stop operation of machines, using levers or buttons.
- Start pumps to mix solutions and fill tanks.
- Thread or feed items or products through or around machine rollers and dryers.
- Transfer completed items or products from machines to drying or storage areas, using handcarts, handtrucks, or cranes.
- Turn dials, handwheels, valves, or switches to regulate conveyor speeds,



## Detailed Work Activities:

- adjust production equipment/machinery setup
- attach or mark identification onto products or containers
- clean equipment or machinery
- examine products or work to verify conformance to specifications
- grade, classify, or sort products according to specifications
- load or unload material or workpiece into machinery
- load, unload, or stack containers, materials, or products
- maintain consistent production quality
- maintain or repair industrial or related equipment/machinery
- maintain production or work records
- measure, weigh, or count products or materials
- monitor production machinery/equipment operation to detect problems
- operate packaging or banding machine or equipment
- package goods for shipment or storage
- perform safety inspections in manufacturing or industrial setting
- stock or organize goods
- test manufactured products or materials
- wrap products

## Technology - Examples

## Data base user interface and query software

- Data entry software

## Electronic mail software

- Email software

## Label making software

- Label printing software

## Spreadsheet software

- Spreadsheet software

## Word processing software

- Word processing software

## Tools - Examples

- Adjustable wrenches
- Dial calipers
- Desktop computers
- Industrial platform scales
- Forklifts

machine temperature, air pressure and circulation, and the flow or spray of coatings or paints.

- Weigh or measure chemicals, coatings, or paints before adding them to machines.

## Detailed Tasks

## Detailed Work Activities:

- adjust production equipment/machinery setup
- apply adhesives, caulking, sealants, or coatings
- clean equipment or machinery
- clean rooms or work areas
- control operation of compressors
- examine products or work to verify conformance to specifications
- install equipment or attachments on machinery or related structures
- load or unload material or workpiece into machinery
- maintain consistent production quality
- maintain production or work records
- measure, weigh, or count products or materials
- mix paint, ingredients, or chemicals, according to specifications
- monitor production machinery/equipment operation to detect problems
- move or fit heavy objects
- operate forklift
- operate glass or stone working equipment/machinery
- operate hoist, winch, or hydraulic boom
- operate metal or plastic fabricating equipment/machinery
- operate mix or blending machine
- operate paint or coating application production machinery
- operate power driven pumps
- operate pulp or paper making equipment
- perform safety inspections in manufacturing or industrial setting
- set up production equipment or machinery
- test manufactured products or materials
- understand technical operating, service or repair manuals
- use hand or power tools
- use precision measuring tools or equipment
- use spray application production equipment
- use spray paint equipment

## Technology - Examples



- Glue guns
- Claw hammers
- Handtrucks
- Pallet jacks
- Label-making machines
- Powered roll lifts
- Locking pliers
- Pallet movers
- Personal computers
- Power drills
- Box cutters
- Scanners
- Phillips head screwdrivers
- Industrial sewing machines
- Power staple guns
- Stencils
- Step stools
- Measuring tapes
- Space measuring gauges
- Utility knives
- Wire brushes

### Labor Market Comparison

Description	Packaging and Filling Machine Operators and Tenders	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	Difference
Median Wage	\$ 24,800	\$ 38,860	\$ 14,060
10th Percentile Wage	\$ 17,150	\$ 21,280	\$ 4,130
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 29,350	\$ 47,830	\$ 18,480
90th Percentile Wage	\$ 41,440	\$ 56,160	\$ 14,720
Mean Wage	\$ 26,470	\$ 38,450	\$ 11,980
Total Employment - 2007	1,710	850	-860
Employment Base - 2006	1,787	968	-819

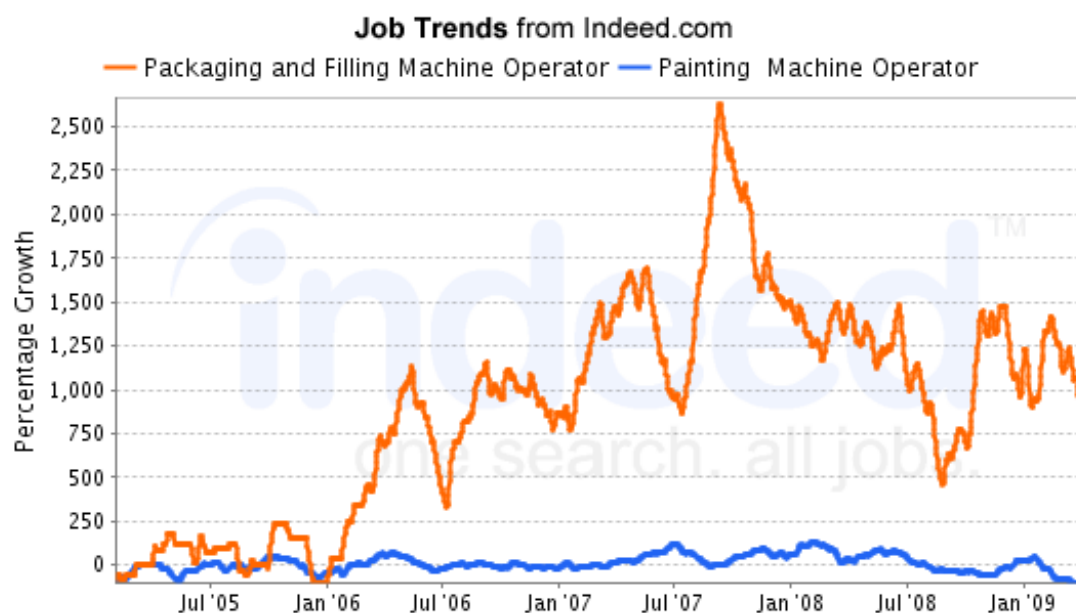


Projected Employment - 2016	1,569	721	-848
Projected Job Growth - 2006-2016	-12.2 %	-25.5 %	-13.3 %
Projected Annual Openings - 2006-2016	33	19	-14

### National Job Posting Trends

Trend for Packaging and Filling Machine Operators and Tenders

Trend for Coating, Painting, and Spraying Machine Setters, Operators, and Tenders



Data from [Indeed](http://Indeed.com)

### Recommended Programs

Auto/Automotive Body Repairer

Autobody/Collision and Repair Technology/Technician. A program that prepares individuals to apply technical knowledge and skills to repair, reconstruct and finish automobile bodies, fenders, and external features. Includes instruction in structure analysis, damage repair, non-structural analysis, mechanical and electrical components, plastics and adhesives, painting and refinishing techniques, and damage analysis and estimating.

Institution	Address	City	URL
Northern Maine Community College	33 Edgemont Dr	Presque Isle	<a href="http://www.nmcc.edu">www.nmcc.edu</a>
Northern Maine Community College	33 Edgemont Dr	Presque Isle	<a href="http://www.nmcc.edu">www.nmcc.edu</a>
Northern Maine Community College	33 Edgemont Dr	Presque Isle	<a href="http://www.nmcc.edu">www.nmcc.edu</a>



## Maine Statewide Promotion Opportunities for Packaging and Filling Machine Operators and Tenders

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings
51-9111.00	Packaging and Filling Machine Operators and Tenders	100	2	1,710	\$24,800.00	\$0.00	-12%	33
53-7063.00	Machine Feeders and Offbearers	88	1	480	\$26,820.00	\$2,020.00	-22%	9
51-9121.00	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	88	2	850	\$38,860.00	\$14,060.00	-26%	19
51-9196.00	Paper Goods Machine Setters, Operators, and Tenders	88	2	910	\$38,230.00	\$13,430.00	-26%	23
51-6064.00	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	87	3	290	\$25,840.00	\$1,040.00	0%	0
51-9032.00	Cutting and Slicing Machine Setters, Operators, and Tenders	87	2	710	\$31,350.00	\$6,550.00	-23%	12
51-4122.00	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	87	2	120	\$36,960.00	\$12,160.00	2%	3
51-9041.00	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	87	2	260	\$28,330.00	\$3,530.00	-7%	5
51-2031.00	Engine and Other Machine Assemblers	87	3	20	\$29,010.00	\$4,210.00	-45%	1
51-5021.00	Job Printers	87	3	140	\$31,890.00	\$7,090.00	-10%	2
51-9051.00	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	86	2	300	\$32,980.00	\$8,180.00	-18%	9





51-4023.00	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	86	2	0	\$33,460.00	\$8,660.00	0%	0
51-9191.00	Cementing and Gluing Machine Operators and Tenders	85	1	80	\$27,620.00	\$2,820.00	-15%	2
51-6062.00	Textile Cutting Machine Setters, Operators, and Tenders	85	3	110	\$24,860.00	\$60.00	-13%	4
51-5011.00	Bindery Workers	84	2	350	\$26,130.00	\$1,330.00	-20%	5

### Top Industries for Coating, Painting, and Spraying Machine Setters, Operators, and Tenders

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Coating, engraving, heat treating, and allied activities	332800	9.61%	10,229	7,965	-22.13%
Architectural and structural metals manufacturing	332300	6.06%	6,454	6,548	1.46%
Plastics product manufacturing	326100	5.19%	5,529	5,567	0.70%
Converted paper product manufacturing	322200	5.18%	5,513	4,395	-20.28%
Wood kitchen cabinet and countertop manufacturing	337110	4.58%	4,877	5,129	5.18%
Self-employed workers, primary job	000601	3.78%	4,020	4,069	1.21%
Other fabricated metal product manufacturing	332900	3.43%	3,648	3,071	-15.83%
Motor vehicle parts manufacturing	336300	3.34%	3,553	2,687	-24.37%
Other general purpose machinery manufacturing	333900	3.17%	3,378	2,897	-14.24%
Other wood product manufacturing	321900	2.75%	2,929	2,622	-10.48%
Boiler, tank, and shipping container manufacturing	332400	2.59%	2,755	2,358	-14.39%
Household and institutional furniture manufacturing	337120	2.27%	2,418	1,748	-27.71%
Office furniture (including fixtures) manufacturing	337200	2.24%	2,387	2,132	-10.67%
Commercial and service industry machinery manufacturing	333300	1.75%	1,861	1,551	-16.67%
Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing	333400	1.67%	1,780	1,555	-12.61%

### Top Industries for Packaging and Filling Machine Operators and Tenders

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
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Employment services	561300	15.91%	61,399	69,938	13.91%
Fruit and vegetable preserving and specialty food manufacturing	311400	6.27%	24,207	19,753	-18.40%
Pharmaceutical and medicine manufacturing	325400	5.30%	20,448	23,193	13.42%
Beverage manufacturing	312100	5.21%	20,102	16,990	-15.48%
Animal slaughtering and processing	311600	4.44%	17,134	17,599	2.71%
Other food manufacturing	311900	4.04%	15,606	14,726	-5.63%
Plastics product manufacturing	326100	4.03%	15,570	14,854	-4.60%
Bakeries and tortilla manufacturing	311800	3.58%	13,834	12,718	-8.07%
Soap, cleaning compound, and toilet preparation manufacturing	325600	3.46%	13,344	11,539	-13.53%
Other support services	561900	3.44%	13,269	16,360	23.29%
Dairy product manufacturing	311500	3.40%	13,143	11,702	-10.96%
Grocery and related product wholesalers	424400	2.79%	10,767	10,596	-1.59%
Warehousing and storage	493100	1.86%	7,173	8,622	20.21%
Grain and oilseed milling	311200	1.80%	6,939	5,446	-21.51%
Sugar and confectionery product manufacturing	311300	1.63%	6,276	4,758	-24.20%